TITLE: Schulich students for emergency childcare: Results of a community initiative during COVID-19

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ABSTRACT

The coronavirus disease (COVID-19) pandemic led to the abrupt suspension of many businesses and services in Ontario including schools and childcare centres. This resulted in many parents struggling to identify options for childcare, including frontline healthcare workers (HCWs). A volunteer initiative composed of medical and dental students was developed to provide emergency childcare support to HCWs in Southwestern Ontario. Experts in areas of public health, law, and bioethics were consulted to minimize the risks associated with participation and develop a clear policy to prioritize the health and safety of all participants. Social media was utilized to recruit volunteers and HCWs who were matched on a first-come, first-served basis. 59 medical and dental students were recruited to provide emergency support for 21 HCWs within the unique safety and ethical conditions posed by COVID-19. By reflecting on the strengths of this initiative and the challenges faced during its completion, key areas of improvement were identified that should be addressed in future initiatives of a similar nature.

INTRODUCTION

As a result of the coronavirus disease (COVID-19) pandemic, all in-person learning at Western University was suspended beginning on March 12, 2020. The situation was declared a provincial state of emergency in Ontario on March 17. Accompanying this was the closure of childcare centres and public schools from March 23 to April 3. This sudden decision and lack of alternative means of support left many parents struggling to find adequate care for their children, including essential healthcare workers (HCWs) working tirelessly on the frontlines of the pandemic. This issue was promptly identified by two medical students (GK and YV) who each used social media to rally their classmates and devise a solution. Thus, Southwestern Ontario Medical Students for Healthcare Workers (SWO Meds for HCWs) was created with the aim of providing emergency childcare support for HCWs within the region of Southwestern Ontario between March 23 to April 3.

ETHICAL CONSIDERATIONS

Balancing the risk of exposing volunteers and HCWs to COVID-19 with the benefits of providing support to essential workers was especially difficult with limited and constantly evolving information about the nature of the virus. Experts in the fields of public health, bioethics, and infectious disease were consulted to provide suggestions for harm reduction which were incorporated into a 25-point policy that was the basis for a legal waiver distributed to volunteers and HCWs. Several notable aspects were:

- Students personally at risk due to medical conditions, or in regular contact with vulnerable or elderly people should not volunteer.
- Students with sick contacts or symptoms of ANY infectious OR respiratory illness in the last 14 days must not volunteer.
- Volunteers must notify the HCW immediately if any symptoms arise during volunteering, stop volunteering, and inform a representative from SWO Meds for HCWs.
- Each volunteer shall only volunteer with one family to minimize the risk of spread between households.
- Volunteers in this program should not participate in any other healthcare setting or with older adults.

The policy was shared with medical student groups across Canada via social media who used it as a part of their own initiatives.

METHODS

HCW and volunteer information was collected using separate Google Forms. The forms were distributed via social media (Facebook and Twitter). The information collected from HCWs included: contact information, location, type of support, times required for support, and additional comments. The information collected from volunteers included: contact information, location, services provided (including childcare experience and of what age), availability, and additional comments.

Intake forms were distributed on March 14 (day 1), 9 days before the onset of the school closure (Figure 1). Legal, ethical, and public health consults took place between March 16-17 (days 3-4). Matching took place between March 17-18 (days 4-5). Policy and waivers were finalized on March 18 (day 5). Volunteers were informed of their assignment on March 19 (day 6). HCW were notified on March 20 (day 7). Volunteers and HCWs were given 24-hours to confirm and return waiver forms.

Figure 1. Timeline of Initiative

A buddy system was employed that matched 2 volunteers to 1 HCW. HCWs and volunteers were matched manually, ensuring at least 1 volunteer had childcare experience suited to the needs of the HCW. HCWs were prioritized on a first come, first-served basis. The urgency and level of need was not factored into consideration as there was no reliable method to quantify this.

Volunteers were organized using a case manager system made up of volunteers. A single case manager coordinated communication between up to 4 volunteer/HCW pairs including confirmation of suitability, collection of waivers, and management of any issues that arose. Case managers were also responsible for check-ins with volunteers to ensure there were no emerging concerns with physical or mental health. This system offered high flexibility for unforeseen

needs of volunteers and HCWs and utilized a pool of 12 volunteers who were unable to support the initiative directly.

OUTCOMES

As of March 20, 2020, 122 HCWs and 105 students had signed up via the intake forms. 120 HCWs requested childcare support. The most common age of HCW children was under 5-years-old. 71 students had childcare experience. Of those, 31 students had experience with children under the age of 5.

Initially, 66 students and 38 HCWs across 5 cities were matched. 21 students and 22 HCWs withdrew from the program. Ultimately, 41 volunteers and 21 HCWs were matched (Table 1). 19 HCWs were matched for childcare and two were provided other services (elder check-in, grocery run). Due to the high volume of withdrawals and rapid turnaround time, there were 4 volunteers who were unable to be matched to a HCW. In addition to the volunteers who participated in direct volunteering, 12 volunteer case managers functioned in a managerial role, and 7 students formed the organizing team (not listed in Table 2). 1 member of the organizing team also participated in direct volunteering. In total, 59 volunteers contributed to this initiative.

Table 2. Initial and Final Number of Matched Student Volunteers and HCWs by City of Service

	Volunteers		HCW	
	Initial	Final	Initial	Final
London	52	29	30	15

Wind sor	8	6	1	3
Dorc hester	2	2	4	1
Stratf ord	2	2	1	1
Woo dstock	2	2	1	1
Total	66	41	38	21

The primary reason for volunteer withdrawal was illness symptoms or contact with someone with illness symptoms. All reasons are listed in Table 3. The reason for HCW withdrawal was not formally recorded. Many HCWs reported finding other arrangements by the time matches were made.

Table 3. Number of Volunteers and HCWs who Withdrew from the Program, by Stated Reason

	Volu nteers	H CWs
Sick symptoms/contact	7	-
Hours/other commitments	3	-
Uncomfortable with arrangement	2	-

Left the city	2	-
Extraordinary circumstances	1	-
Reason unstated	6	2 2
Total	21	2 2

DISCUSSION

Strengths

The program was conceived, organized, and mobilized in the span of 9 days while accounting for the safety of all parties involved during early and evolving stages of the COVID-19 pandemic. The aim of the program was achieved by connecting HCWs with suitable volunteers to ease the burden of childcare.

Future Recommendations

An unanticipated outcome of the program was the significant number of volunteers and HCW withdrawals. Two factors that potentially contributed to this outcome are unmanaged expectations and the length of turnaround from registration to matching.

HCWs and volunteers often had different expectations from this program. The level of support requested by HCWs ranged from part-time support to full-time (40 hours per week) childcare. Similarly, students had variable amounts of time available to commit, ranging from volunteering during gaps in their schedule (i.e. due to cancelled classes) to full-time. Unmet

needs often resulted in withdrawal. Approaches to overcoming this limitation could include explicitly outlining expectations in initial communications, and improved collection of data using intake forms. Clearer guidelines on what the program could and could not offer may have reduced the number of HCWs and volunteers that registered for the program but would have likely improved the withdrawal rate. The collection of additional data in the intake forms would allow for a more suitable match to be made. Suggestions for data to collect are outlined in Table 3.

Table 3. Recommended Data to be Collected in Intake Forms for Future Iterations

HCW	Volunteer
Contact information	Contact information
Location (city)	Location (city)
Location (region/address)	Location (region/address)
Type of support required	Type of support provided (childcare, grocery, etc.)
Number of Children	Childcare experience (ages)
Child ages	Access to vehicle (Y/N)
Special needs/considerations	Willingness to commute:

	within city or neighbouring city
Times required	Times available
Supports available (E.g. parent working from home, nanny, etc.)	Total time available to commit
Additional comments	Additional comments

The turnaround time for matching was limited by the completion of legal waivers/policy, which were finalized on day 5 (Figure 1). HCWs were not notified until day 7, which was 2 days before the start of the school closure. As a result of this timeline, many HCWs made other arrangements for childcare and subsequently withdrew. Creation of the waivers for the novel risk of COVID-19 was an extensive process that involved consultation with medical, legal, and ethical experts. The organizing team considered the delay of contact until the waivers/policy were completed to be a necessary precaution in the interest of public health and safety.

Assessing Need

It is recommended that future initiatives of this nature explore alternative methods of prioritizing HCW needs. In the absence of quantifiable need, a first come, first-served approach to allocation did not achieve fair distribution of scarce resources as it privileged those with earlier access to intake forms. It has been suggested by Emmanuel et al. that in the face of limited information and time pressure, fair and equitable distribution of limited resources is achieved best by random allocation rather than a first come, first-served basis.¹

Assessing HCW and Volunteer Satisfaction

It is suggested that future initiatives of this nature consider exploring volunteer and HCW experiences and overall satisfaction as a method of program evaluation.

Buddy System

The buddy system reduced the number of available volunteers in a scenario where there were insufficient volunteers to meet the needs of HCWs. Despite this, it was implemented primarily out of concern for the safety of both volunteers and HCWs. There was insufficient time and resources to perform background checks on all volunteers and HCWs. A buddy system offered greater accountability for both volunteers and HCWs. Furthermore, it enabled volunteers without childcare experienced to participate by being paired with an experienced partner.

Matching System

Due to the rapid turnaround time for this program, there was no opportunity to automate or optimize a matching system. Matches and withdrawals were processed manually by 2 individuals based on information available from the intake forms. In particular, the high volume of withdrawals (both students and HCWs) was not anticipated and therefore not built into the timeline, resulting in an inefficient *pro re nata* process of rematching. Under ideal circumstances, rematching would be delayed for an additional 24 hours to allow time for all withdrawals to be pooled and matched again in a second round.

Termination of the Program

The extension of school closures on March 31, 2020, by the Government of Ontario raised questions regarding program continuation. Key considerations included the increasing level of COVID-19 risk, persistent needs of HCWs, and the availability of volunteers. Ultimately

the program was formally terminated at the original date with volunteers given the option to continue if they chose to do so. This decision was reached upon reflection of the original program goal to be a bridging, rather than permanent, solution to the COVID-19 childcare problem.

Program Derivatives

To further contribute to meeting the needs of local HCWs, the organizing team approached local nursing student leaders to assist them in developing a similar initiative which launched on March 22, 2020.

CONCLUSION

During the beginning of the COVID-19 pandemic, a group of 59 medical and dental students provided childcare and additional support for essential healthcare workers in Southwestern Ontario. This volunteer initiative was successful in organizing and mobilizing resources in an expedited manner while navigating uncharted ethical and safety concerns.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the support of Cohen Highley LLP Lawyers, Schulich Communications, CFMS COVID-19 Community Care Initiative Grant, and the numerous faculty members at Schulich Medicine who shared their expertise with us.

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